

CLAIMS

1. Method for cooling a roller device, which consists of a right bearing housing, a left bearing housing, and a roller, which is rotatably supported by journals in the bearing housings, especially of strand guide rolls, roller table rollers, pinch rolls, support rolls, or driving rolls in continuous casting plants, in which a cooling medium is passed through an axial bore in the roller, characterized by the fact that the cooling medium additionally cools the bearings (13, 14) mounted in the bearing housings (2, 3).

2. Method in accordance with Claim 1, characterized by the fact that the cooling medium enters the bearing housing (2, 3) of the roller device (1) on one side, passes around the bearing (13, 14) mounted in this bearing housing (2, 3), then flows through the axial bore in the roller (4) to the other side, passes around the bearing (13, 14) mounted in the other bearing housing (2, 3), and is then discharged from the roller device (1).

3. Method in accordance with Claim 1 or Claim 2, characterized by the fact that the cooling medium passes from the bearing housing (2, 3) into the rotary passage (7, 8) through a rigid or flexible connector (5, 6) that is flange-mounted on the end face.

4. Roller device, which consists of a right bearing housing, a left bearing housing and a roller, which is rotatably supported by journals in the bearing housings, especially of strand guide rolls, roller table rollers, pinch rolls, support rolls, or driving rolls in continuous casting plants, in which a cooling medium is passed through an axial bore in the roller, characterized by the fact that bores (15), which form a closed cavity, are arranged around the bearings (13, 14) mounted in the bearing housings (2, 3).

5. Roller device in accordance with Claim 4, characterized by the fact that a discharge bore for the cooling medium, which is arranged on the end face of the bearing housing (2, 3), is located next to the bearing cover (9, 10).

6. Roller device in accordance with Claim 4 or Claim 5, characterized by the fact that the rotary passage (7, 8), which is arranged centrally in the bearing cover (9, 10), is connected by a rigid or flexible connector (5, 6) with the discharge bore on the end face of the bearing housing (2, 3).

7. Roller device in accordance with Claim 6, characterized by the fact that the rotary passage (7, 8) is detachably connected with the bearing cover (9, 10).

8. Roller device in accordance with any of Claims 4 to 7, characterized by the fact that the rotary passage (7, 8) in the bearing cover (9, 10) can compensate linear expansion of the roller (4).